UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/687,386	10/15/2003	J. Christopher Moulder	A03P1070 2107		
36802 PACESETTER	36802 7590 09/18/2007 PACESETTER, INC.			EXAMINER	
15900 VALLEY VIEW COURT			MALAMUD, DEBORAH LESLIE		
SYLMAR, CA 91392-9221			ART UNIT	PAPER NUMBER	
			3766		
			MAIL DATE	DELIVERY MODE	
			09/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	/
*A ~ /	
i/~	

	Application No.	Applicant(s)				
	10/687,386	MOULDER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Deborah Malamud	3766				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 10 Ju	1) Responsive to communication(s) filed on 10 July 2007.					
, —	, —					
3) Since this application is in condition for allowar						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45					
Disposition of Claims						
4) Claim(s) 1,4-6,8,9,11,12 and 20-26 is/are pend	-					
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1,4-6,8,9,11,12 and 20-26</u> is/are rejective.	ted.					
7) Claim(s) is/are objected to.	r election requirement					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) ☐ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on 15 October 2003 is/are:						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Try The oath of declaration is objected to by the Ex	ammer. Note the attached Office	Action of form F10-132.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
ded the attached detailed emice action for a list of the definited copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application				

Application/Control Number: 10/687,386 Page 2

Art Unit: 3766

DETAILED ACTION

1. The examiner acknowledges the arguments received 10 July 2007. Claims 2-3,

7, 10 and 13-19 are cancelled; claims 1, 4-6, 8-9, 11-12 and 20-26 are pending.

Response to Arguments

- 2. Applicant's arguments filed 10 July 2007 have been fully considered but they are not persuasive. It is to be noted that the H-bridge as disclosed by Ostroff (previously cited art) is not considered by the examiner to be a charging circuit. Ostroff discloses (par. 0019; Figure 1) the drive circuit (15) for "supplying voltage or energy to the H bridge circuit (13)," and it is the driving circuit (15) that the examiner was considering to be the charging circuit. The output is signified by R_{PAT}. The voltage storage device (C1 capacitor) as disclosed by Ostroff is indeed coupled between the driving circuit (15) and the H bridge circuit (13).
- 3. The examiner further notes that Ostroff discloses (par. 0025-0026; Figure 2) closing the H bridge switches H_1 , L_2 to produce a biphasic waveform; an inverted biphasic waveform may also be produced by activating the H_2 and L_1 switches. Ostroff also teaches that "[t]he times t_1 , t_2 , t_3 , t_4 can easily be adjusted to further control the shape of the waveform, for example, such that ΔV remains constant for each interval of decay despite the change in time constants each time an additional capacitor, e.g., C_2 , C_3 , C_4 , is switched into the current." This is indeed a pulse width modulation, performed by the switches on the legs of the H-bridge, in response from a switching signal from the capacitors SW_2 - SW_4 , which correspond to the capacitors of the charging circuit.

Application/Control Number: 10/687,386 Page 3

Art Unit: 3766

4. For these reason, and for reasons outlined in the previous Non-Final Office Action, the rejection of the claims is maintained.

Claim Rejections - 35 USC § 102

- 5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 6. Claims 1,4-5, 9, 11, 20, 22-23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Ostroff et al (U.S. 2003/0088281). For a full discussion of the claimed elements, please see above, and the previous Non-Final Office Action.

Claim Rejections - 35 USC § 103

- 7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 8. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostroff et al (U.S. 2003/0088281) in view of Brink (U.S. 5,725,560); claims 8, 12, 24 and 26 over Ostroff et al (U.S. 2003/0088281). For a full discussion of the claimed elements, please see above and the previous Non-Final Office Action.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/687,386 Page 4

Art Unit: 3766

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Malamud whose telephone number is (571) 272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D. Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/687,386 Page 5

Art Unit: 3766

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PRIMARY EXAMINER

Domalamud Deborah L. Malamud Patent Examiner Art Unit 3766